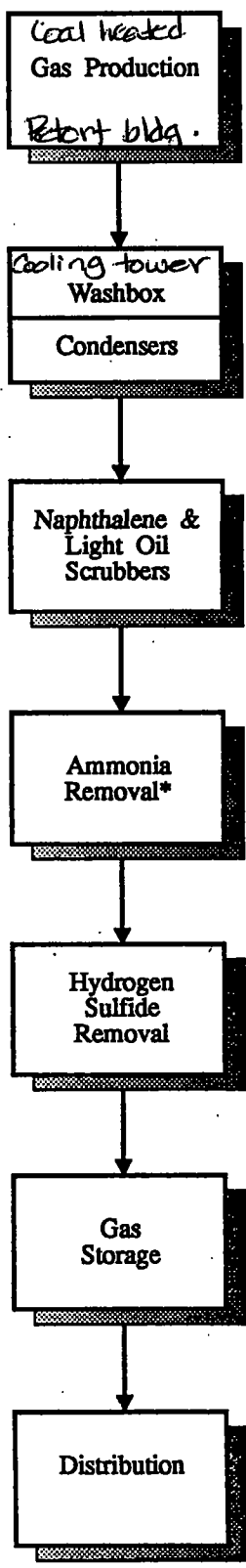


Site: Citizen's Gas & Co.
ID #: 1AD984589093
Break: 1.6
Other: NO DATE

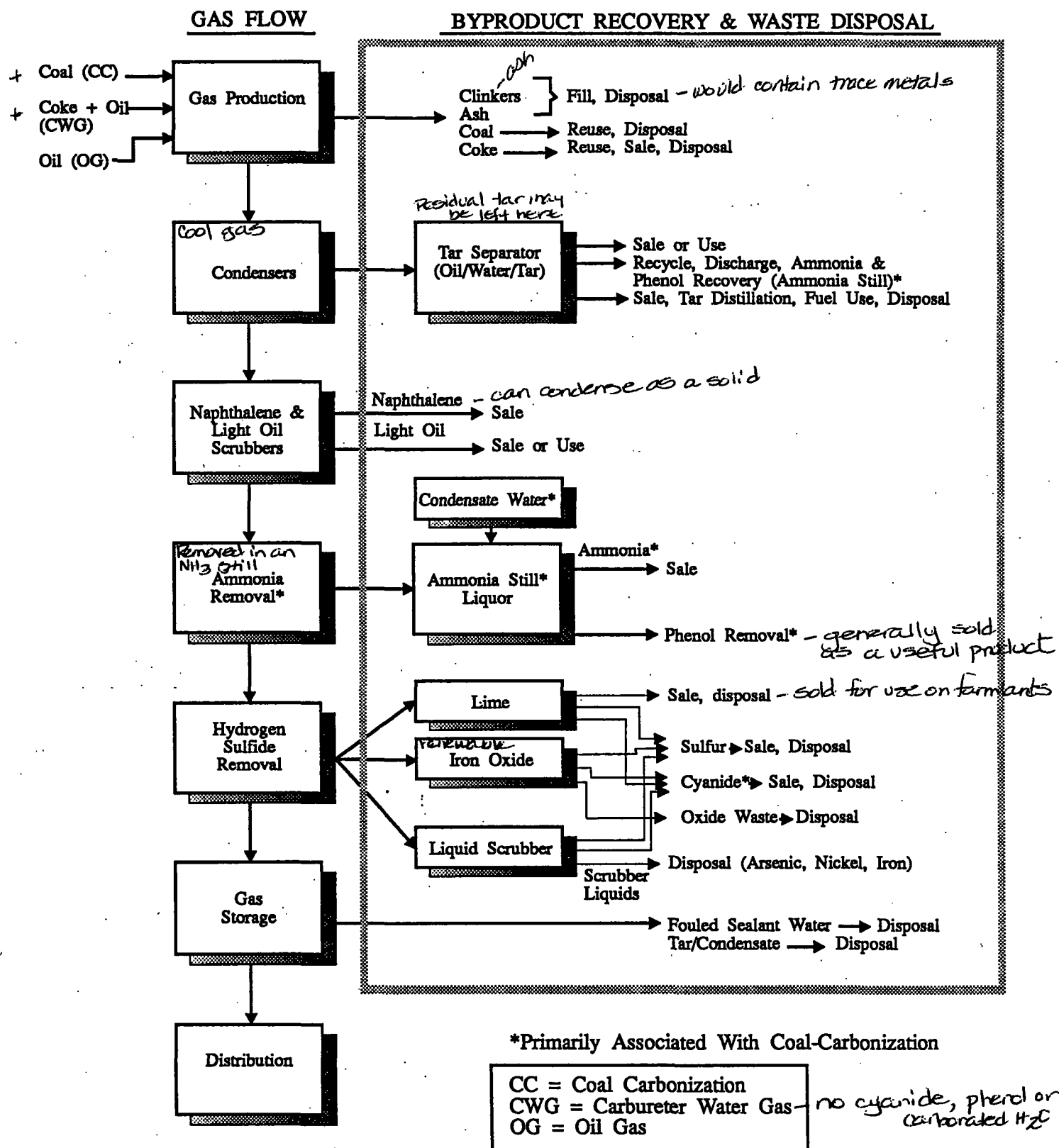


* For Coal Carbonization Processes

30233287

Superfund

MANUFACTURED GAS PRODUCTION AND PURIFICATION PROCESSES



MANUFACTURED GAS PROCESS, BYPRODUCT RECOVERY AND WASTE DISPOSAL

Michael J. Kisicki
Manager, Engineering Services



PEOPLES NATURAL GAS

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PREVIOUS INVESTIGATION

GROUNDWATER

MW3: A plume was detected downgradient of the former tar pit area

**MW1/: No plume was detected at
MW2 the upgradient east side
of the site**

**The hydraulic gradient across
the fine alluvium is downward**

**MW4: No significant plume was
detected at the upgradient
side of the west gasometer
area**

SOIL

- 5 Waste is present at the former
tar pit area**

- 6 Waste is present at the former
purifiers area**

- 8 Waste is present at the former
west gasometer area**

- 7 , 14 The extent of waste observed in
the purifier/west gasometer/tar
pit area is limited**

- 1 , 2 , 3,
4 , 9 , 10 Waste was generally not
observed on the east parcel
of the site**

**13 The east gasometer should be
investigated to assess the
potential presence of waste**

GROUNDWATER

IS the samp. analysis from MW3 representative of MW3?

MW5: Is the plume at MW3 from an upgradient source?

MW6: Has heavier-than-water waste migrated to bedrock?

MW7: Is the plume narrow or wide? Is there a plume downgradient of the west gasometer?

MW8: Is the plume narrow or wide? Is there a plume downgradient of the east gasometer?

MW9: How far has the plume traveled?

SOIL

- A** **Is waste present at the east gasometer?**
- B** **What is the range of concentrations of waste at the tar pit?**
- C , D , E** **What is the extent of the tar pit?** *Is it cont. w/in an underground structure?*
- F** **What is the extent of waste north of the purifier area? Is oil present in the former oil tanks area?**
- G** **What is the range of concentrations of waste at previous Boring ST-13?**
Get lab results on borings again.

SOIL SAMPLES

Field Screening

- Organic Vapor
- Oil Sheen Observations
- Discoloration

Laboratory Analysis

Routine:

- Benzene, Ethylbenzene, Toluene, Xylene
- Polynuclear Aromatic Hydrocarbons - *tar fractions*
- Cyanide

Selected Samples:

- Phenol
- Arsenic
- Lead
- Mercury

*Petroleum / hydrocarbon in
some samples*

MW1 EXISTING MONITORING WELL

4 EXISTING BORING

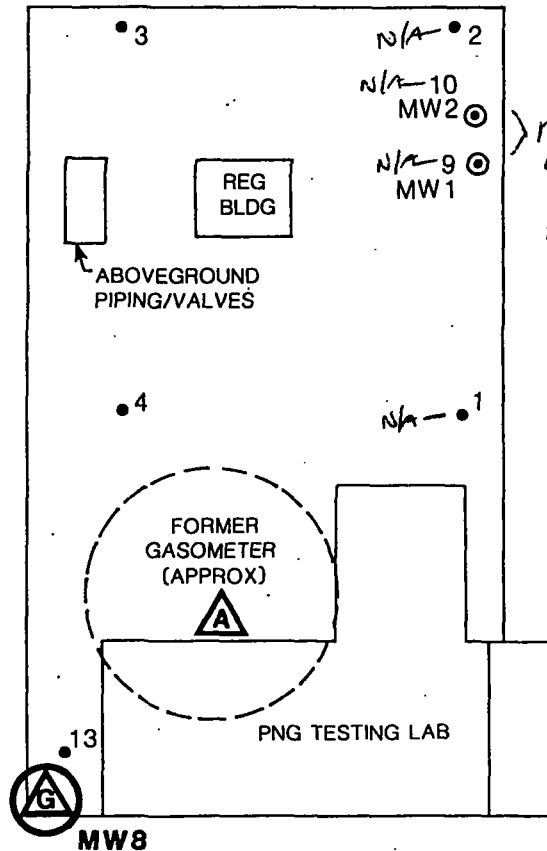
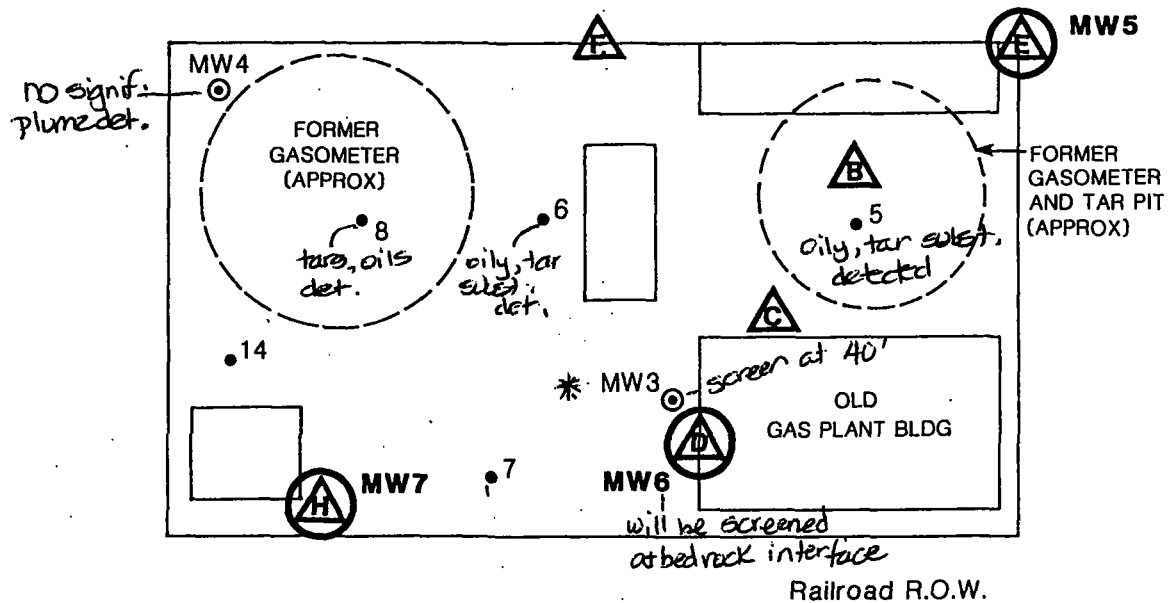
MW5 PROPOSED MONITORING WELL

PROPOSED BORING

10th Avenue

GROUNDWATER FLOW

South 7th St



no plume detected
I was screened
in aquifer

COUNCIL BLUFFS

FORMER MANUFACTURED GAS PLANT

